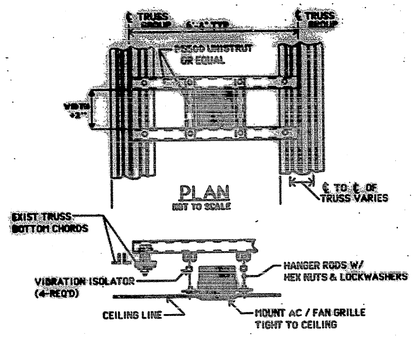


DUCT SIZE	HANGER SIZE	MAX. SPACING
Up to 2.5sq. Ft.	1"x 1/8"	8'-0"
2.5 to 4.5sq. Ft.	1"x 1/8"	6'-0"
4.5 to 10.5sq. Ft.	1"x 1/8"	5'-0"
over 10.5sq. Ft.	1"x 1/8"	4'-0"

DUCT HANGING DETAIL AND SCHEDULE OF SUPPORTS

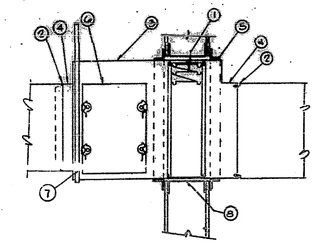


TYPICAL HANGING DETAIL AC UNIT / EXHAUST FAN

NOT TO SCALE

VENTILATION INDEX

RM	AREA	P	VOLUME	VENT IND.	REQ. SUP. CFM	REQ. RET. CFM	REQ. SUP. CFM/SQFT	REQ. RET. CFM/SQFT	ACT. SUP. CFM/SQFT	ACT. RET. CFM/SQFT
1	4400	127	37750	648	3960	3960	0.9	0.9	0.9	0.9
2	3100	57	24552.5	1010	1860	1860	0.6	0.6	0.7	0.7
3	338	6	2899.35	784	304	304	0.9	0.9	1.2	1.2
4	175	2	1500.63	1625	87	87	0.5	0.5	0.7	0.7
5	125	2	1097.5	1188	76	76	0.6	0.6	0.7	0.7
6	169	2	1449.18	1569	84	84	0.5	0.5	0.7	0.7
7	128	2	1097.6	1188	76	76	0.6	0.6	0.7	0.7
8	116	0	NO OCCUPANCY - STORAGE ROOM							
9	85	6	737.45	266	103	103	1.2	1.2	1.7	1.7
10	110	0	NO OCCUPANCY - TAPE STORAGE ROOM							
11	90	2	771.75	835	81	81	0.9	0.9	1.1	1.1
12	190	4	1629.25	862	114	114	0.6	0.6	0.8	0.8
13	230	0	NO OCCUPANCY - TAPE STORAGE ROOM							
14	480	4	4116	2229	192	192	0.4	0.4	0.5	0.5
MER	90	0	NO OCCUPANCY - MECHANICAL EQUIPMENT ROOM							

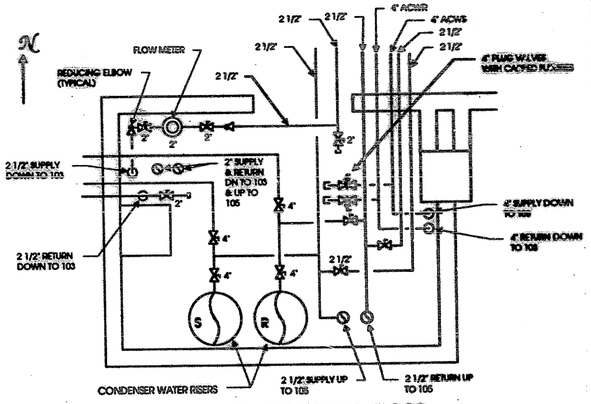


TYPE 'D'
LOW OR MEDIUM PRESSURE SUPPLY DUCT

①	FIRE DAMPER	SEE NOTE 1 & 6
②	DUCT COLLAR CONNECTION	SEE NOTE 2,3 & 8
③	SLEEVE	SEE NOTE 2,4,6,7 & 9
④	TAP	SEE NOTE 2,3,5, & 8
⑤	RETAINING ANGLE	SEE NOTE 7
⑥	ACCESS DOOR	SEE NOTE 10
⑦	SUPPORT	14 GAUGE METAL WITH HEMMED EDGES. ATTACH WITH #8 10 S.M.S. SCREWS. MINIMUM 2 PER SIDE.
⑧	STEEL STUD FRAMED OPENING IN WALL	SEE ARCHITECTURAL DRAWINGS FOR DETAILS

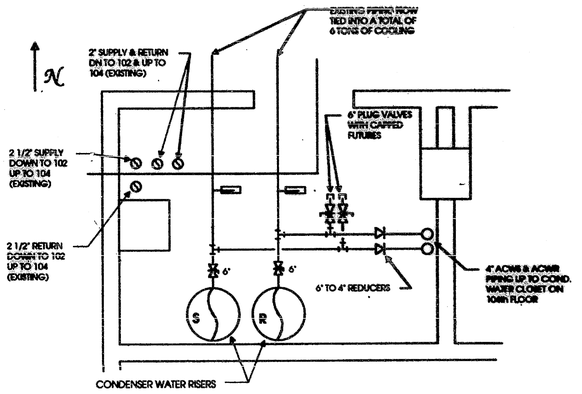
FIRE DAMPER NOTES

1. All fire dampers shall be rated to maintain the rating of the fire separation. They shall be approved and labeled by Underwriters Laboratories (U.L.) and New York City Board of Standards and Appeals (B.S.A.). Installation shall be in accordance with this drawing. Dampers shall be similar and equal to Type A as manufactured by Air Balance Inc. Dampers shall be Air Balance Inc., Air Damper Mfg. Corp. or Airstream Products Inc. A copy of the New York City Board of Standards and Appeals Calendar Item showing approval of the proposed fire damper shall be submitted for record.
2. All work shall conform, as a minimum, with ASHRAE & SMACNA.
3. Connections between collar and ductwork shall be breakaway type such as "S" slip, crimp, or other slip type in accordance with SMACNA Plate 15A, 4th Edition, and Plate 1, SMACNA Fire Damper Guide, 1970.
4. Fire damper sleeve at partion of hollow fire rated construction shall be 14 U.S. Standard gauge sheetmetal in conformance with New York City Building code C26-504.5 (c).
5. Taps shall not be of lighter gauge than connecting ductwork. Minimum gauge shall be 18.
6. Fire damper and taps shall be attached to sleeve by spotwelding. Welds for attaching damper shall be in two (2) rows, six (6) inches apart, minimum two (2) welds per side. Welds for taps shall be one (1) row, two (2) inches apart.
7. Retaining angles shall be placed on both sides of wall and secured to sleeve with No. 10 sheet metal screws c 1/4" dia. nuts and bolts 6 inches center to center, minimum 2 per side. Angles shall be 1-1/2"x 1-1/2"x 14 gauge galvanized steel and shall not be attached to the wall.
8. The contractor shall seal all joints of the sleeve with sealant. The joint between taps and ductwork shall be made tight and secured by No. 10 sheet metal screws (one per side of rectangular duct, or three per round duct), sealed with sealant and then taped. All joints shall be airtight. Sealant shall be 3M Company No. 800 or approved equal and tape shall be Gray Vinyl Duct Tape as manufactured by Nashua Corp. or approved equal.
9. To allow for expansion, dampers shall have a tap clearance equivalent to 1/8" for each foot of damper height. The side clearance shall be 1/8" for each foot of damper width divided equally to the right and left of the collar. The maximum clearance for the top and the total of both sides shall be 1/2".
10. Access door shall be placed on either side of the sleeve only. If the side installation does not permit access to the damper for inspection and maintenance, the door may be placed on the bottom of the sleeve. In any event, access to the fire damper must be assured.



COND. WATER CLOSET 104th FLOOR

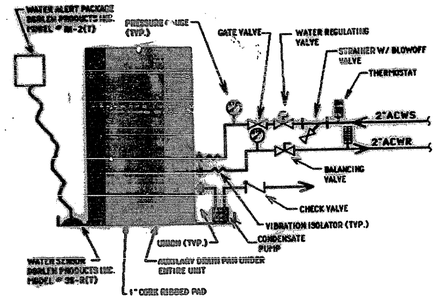
SCALE 1/2" = 1'-0"



COND. WATER CLOSET 103rd FLOOR

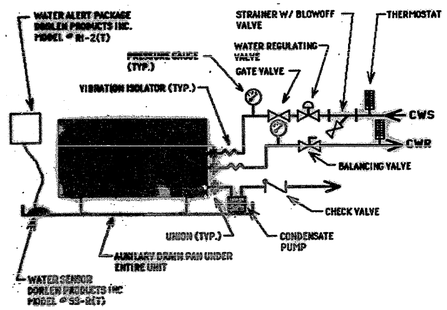
SCALE: 1/2" = 1'-0"

NOTE: NO WORK IS TO BE PERFORMED IN THE COND WATER CLOSETS. THESE PLANS ARE SHOWN FOR INFORMATION PURPOSES ONLY.



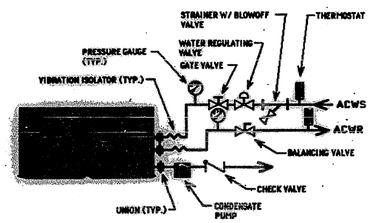
AC - 5 PIPING SCHEMATIC

NO SCALE



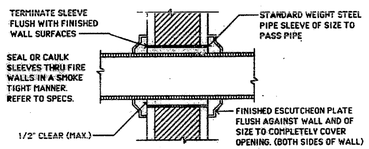
AC - 6 PIPING SCHEMATIC

No Scale



AC-7 & 8 PIPING DIAGRAM

NO SCALE



TYPICAL DETAIL OF PIPE THRU RATED WALL

NO SCALE

REV. No.	DESCRIPTION	DATE
#1	REVISED AS PER P.A. COMMENT	7-3-92

Cantor Fitzgerald Securities
One World Trade Center Floor 104
New York, NY 10048

MECHANICAL DETAILS

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South Plainfield, NJ 07080
(908) 561-4170 Fax (908) 753-0804

SCALE: AS NOTED	DRAWN BY: PB	CHK'D BY: JCW
DATE: 6-1-92	JOB NO. 9211	M-4